

IN THE SPECIFICATION:

Please replace paragraph 0007, with following rewritten paragraph:

A prior art analog polarimeter is shown in FIG. 1. The horizontal signal V_h is supplied to one input of a four port directional coupler 200 of a type referred to as a "hybrid." The vertical signal V_v is supplied to the input of a phase shifter 202 which applies a known phase shift ϕ to that signal. The phase-shifted signal is supplied to another input of the directional coupler 200. The coupler 200 provides a signal at a first output 204 representing the coupled power output or sum of the input signals supplied to the circuit, and also provides a signal representing a specific phase shift between the input signals at a second output 206. In this prior art example, the phase shift is 180° . The first or sum output 204 of circuit 200 is supplied to the input of a further phase shifter 208 which applies a known phase shift . The output of this phase shifter is connected to one input of another directional coupler 210, which is similar to the first 200. The second or difference output 206 of combining circuit 200 is connected directly to the other input of combining circuit 210. Thus, when time-varying V_v and V_h signals are applied to the polarimeter, one time-varying output signal, referred to as the Δ signal appears at the difference output 212 of coupler 210. Another time-varying output signal referred to as the Σ signal, appears at the sum output 214 of coupler 210. The output signals are supplied to a dual-channel receiver and logarithmic amplifier 216 which monitors the amplitudes of these signals and provides a signal representing a ratio between their amplitudes. This ratio signal is supplied to a null adaptive tracker 218, which adjusts the phase differences ϕ and applied by the phase shifters to achieve a null condition as discussed below.